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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,363	11/25/2003	Steven Shepley	D-1220	4710

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EXAMINER	
HESS, DANIEL A	
ART UNIT	**PAPER NUMBER**
2876	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/722,363	SHEPLEY ET AL.	
	Examiner	Art Unit	
	Daniel A. Hess	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,12,13 and 21-27* is/are rejected.

7)☒ Claim(s) *8-11 and 14-20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to Applicant's response of 4/23/2007 to the election/restriction requirement.

Election/Restrictions

The Applicant's arguments were convincing. The **restriction requirement is withdrawn** and all 27 claims now presented are examined.

Claim Objections

Claim 1 is objected to because of the following informalities: In the fourth-to-last line, the claim reads 'a diagnostic *application* of the at least one diagnostic application' but this does not make sense and is redundant. It is believed that the claim should read, 'a diagnostic *interface* of the at least one diagnostic application'. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 6, 7, 12, 13, 21-23, 26 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Krawiec et al. (US 7,051,096). It is noted that the Examiner has also reviewed Krawiec et al.'s provisional application 60/152,183 filed 9/2/1999, and confirmed Krawiec et al.'s priority.

Re claims 12 and 27: Krawiec et al. teaches the core inventive concept, present in each of the independent claims, of an ATM operating using XFS, wherein a diagnostic application bypasses the XFS layer to interact directly with devices to perform some testing functions.

Firstly, regarding the presence of XFS, this is amply conveyed throughout Krawiec et al. Figures 1 and 8 show the presence of the XFS layer. The normal usage of XFS is clear (column 2, lines 15-20): "Windows Open Services Architecture Extensions for Financial Services (WOSA/XFS) were developed to define a standard for application control of specialized ATM peripherals."

That Krawiec in particular uses XFS is stated at column 4, lines 10-15. Many further references to the usage of XFS in Krawiec are made in Krawiec's disclosure, all demonsrating that the first part of the claim.

Secondly, regarding a diagnostic application which bypasses the XFS layer to access the hardware directly, this Krawiec teaches this at column 16, lines 52+: "For example, diagnostics 32 executes diagnostics requests on behalf of a diagnostic client, such as the IMP controller using OLE automation 176. **In addition, diagnostics 32 communicates directly with the physical device handlers (PDH) for all devices 178**, activates PDHs at the beginning of a

diagnostics session (Start Diag) 180, uses the PDH message interface to **command and/or control devices** 182, and deactivates PDHs at the end of diagnostics session (End Diag) 184. **Further, diagnostics 32 performs various diagnostics tests on certain peripheral devices 186, and can determine and provide the specific device list to a client 188.**"

Re claim 1: A computer and transaction functions are both inherent and explicitly discussed. A device driver layer with service provider components can be seen in figure 1. A diagnostic interface, namely a diagnostics client, can be seen in figure 1. There must be a terminal application; this is shown in at the top of figure 1. It can be easily understood how the options in the application layer (example 'Withdrawals') correlation with the operation of devices (i.e. cash dispenser).

The operation of the XFS layer, once again is shown in figure 1 and elsewhere.

As for the diagnostic software causing an internal component to perform at least one function, once again see column 16, lines 52+.

Re claim 2: In Krawiec et al., the diagnostics bypass the XFS layer, as is made clear at column 16, lines 52+.

Re claims 6, 13: A module interface can be another way of referring to a device driver. Figure 1 clearly shows the device driver layer.

Re claim 7: See discussion re claim 6 and see figure 1 of Krawiec.

Re claim 21: See earlier discussion of Krawiec. Diagnostics bypass the layered architecture (see column 16, lines 52+ in Krawiec) to interface directly with the hardware.

Re claim 22: These limitations are present in claim 27, discussed above.

Re claim 23: See figure 1 of Krawiec, where this method of the layers interfacing is embodied in the shown layer structure.

Re claim 26: As Krawiec makes clear throughout, in normal operation, customer commands go through the XFS layer. Naturally this would include the main primary functions of the ATM (i.e. card reading and cash dispensing).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3-5, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krawiec et al. as applied to claim 1 above.

Re claim 3: The Examiner, who majored in Computer Science as an undergraduate, takes Official Notice that it is typical for a resource to be locked by a handler that uses the resource. In general, a variety of problems can occur when two resources try to interact with the same resource at the same time.

Based on this, it would have been obvious to one of ordinary skill in the art at the time the invention was made to for the diagnostic application of Krawiec to gain an exclusive lock on

the hardware during testing (which means deactivating those devices with respect to the XFS layer) in order to avoid the problems associated with resource conflicts.

Re claims 4, 5, 24 and 25: A motor and a sensor are both standard components in an ATM, and while Krawiec is not explicit on what diagnostic tests he runs, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform diagnostics on parts subject to breakdown, such as motors and sensors.

Allowable Subject Matter

Claims 8-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or fairly suggest, in the context of the other limitations upon which claim 8 depends, the specific software architecture recited in claim 8.

Claims 14-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or fairly suggest, in the context of the other limitations upon which claim 14 depends, the specific software architecture recited in claim 14.

Conclusion

Osborne (US 2006/0112012) is noted merely as another example of an ATM system operating using an XFS architecture. Osborne does not have priority on the Instant Application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

7/12/07

DANIEL HESS
PRIMARY PATENT EXAMINER